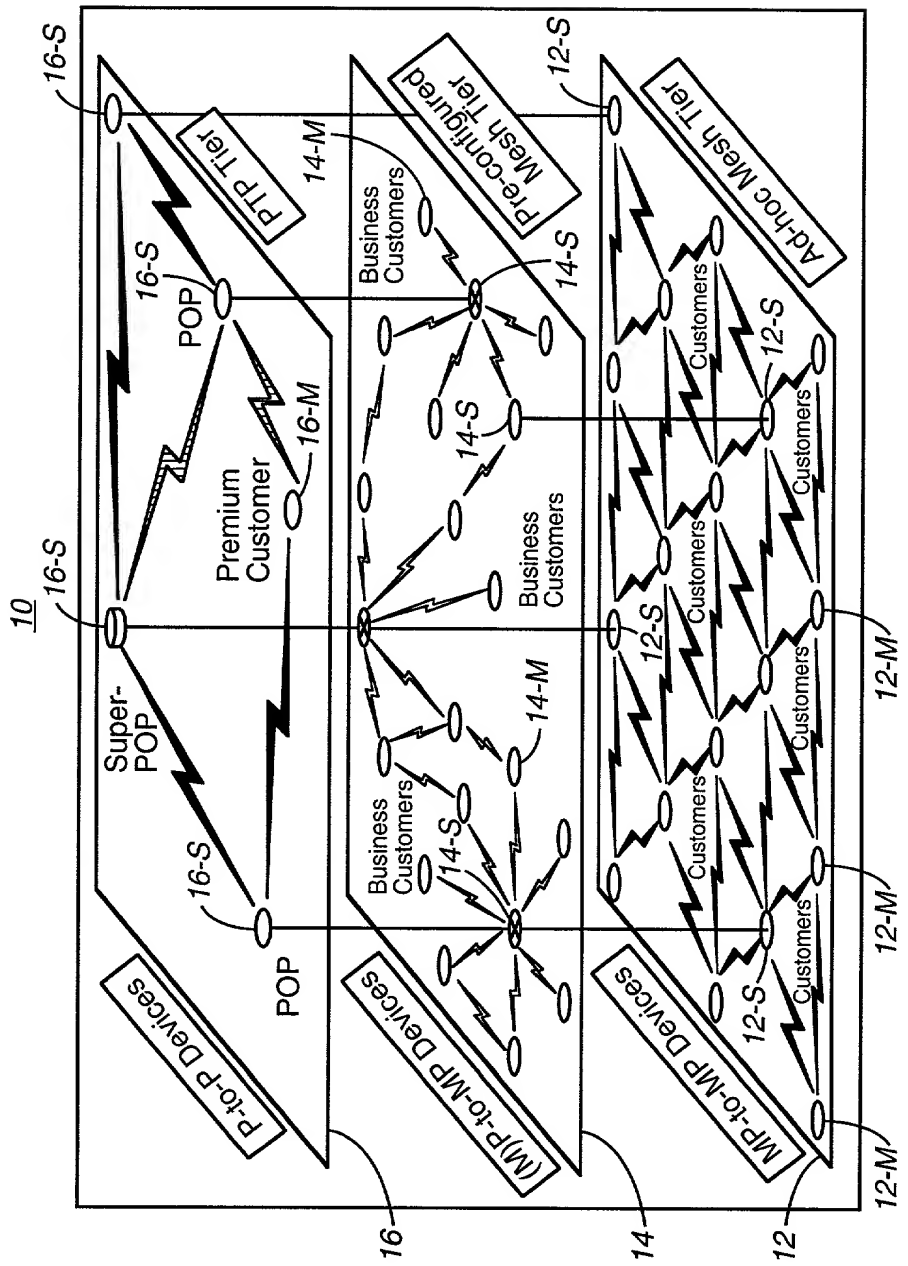
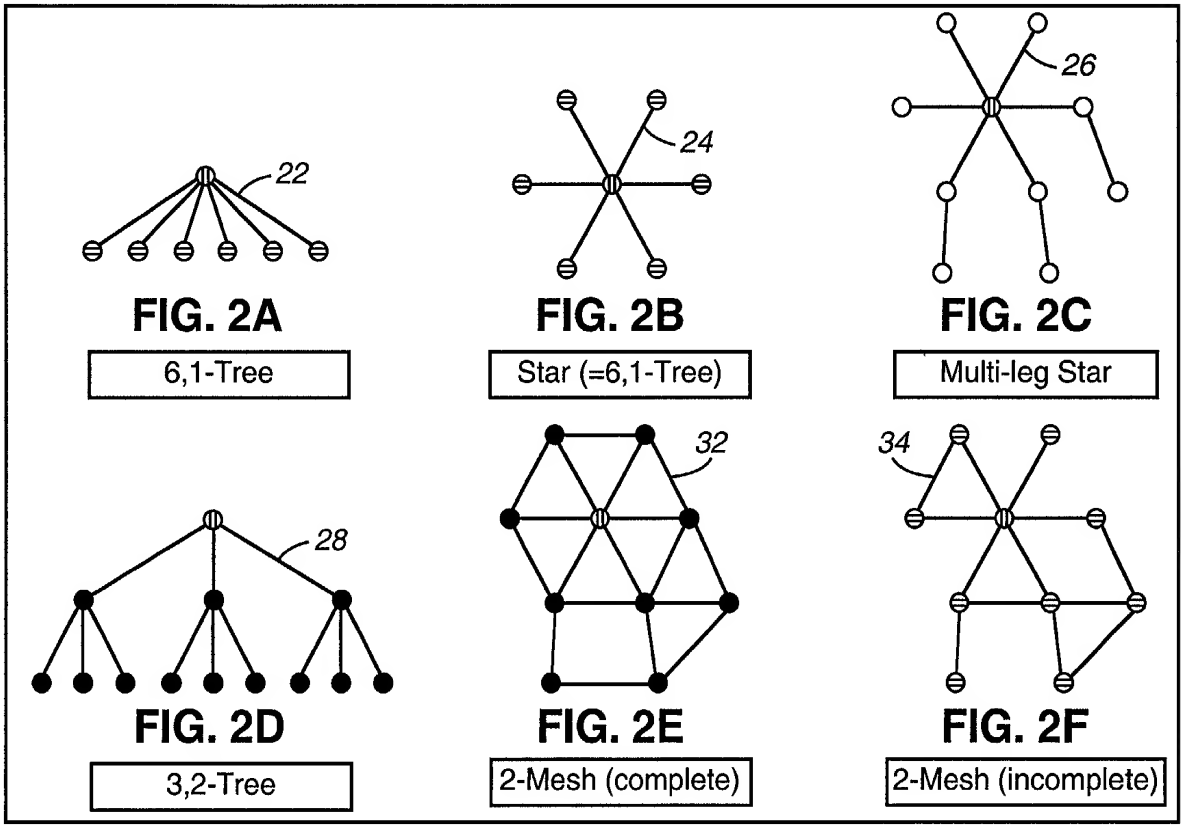


Network concept

FIG. 1



Mesh and mesh derivated network topology examples

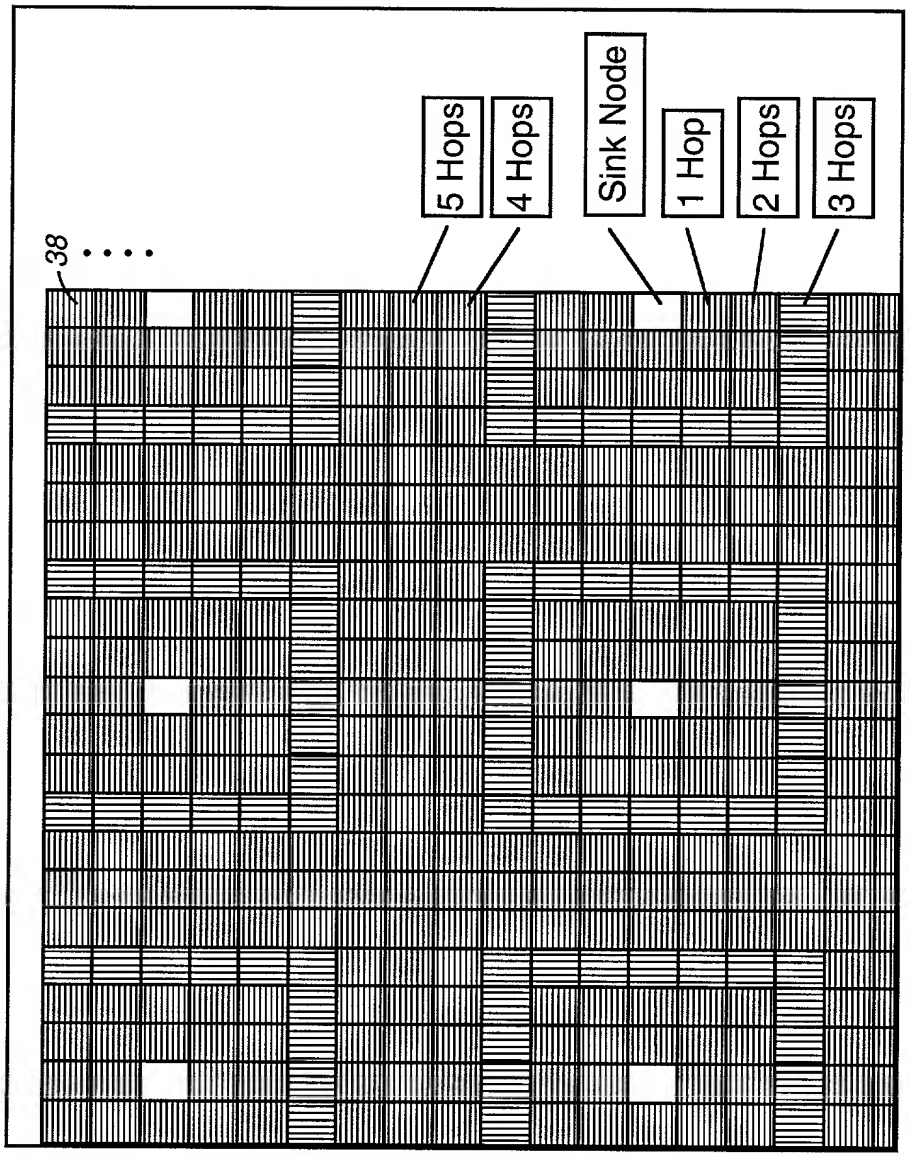
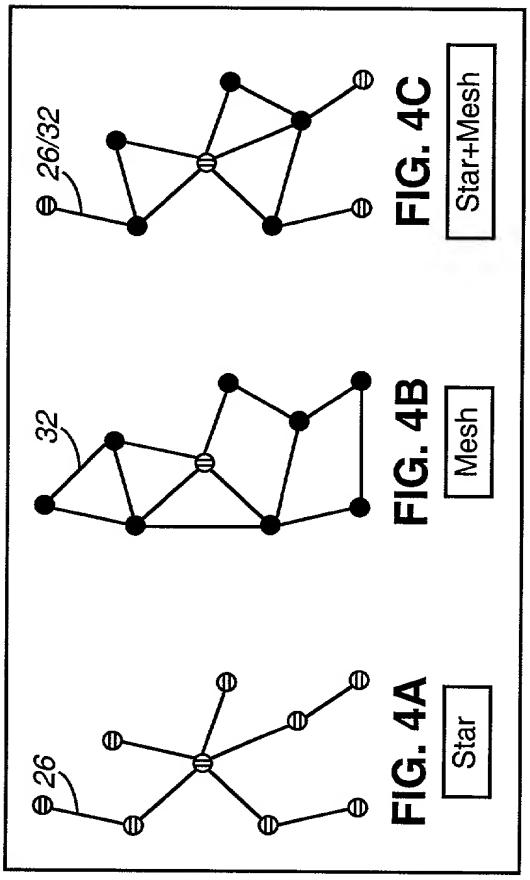
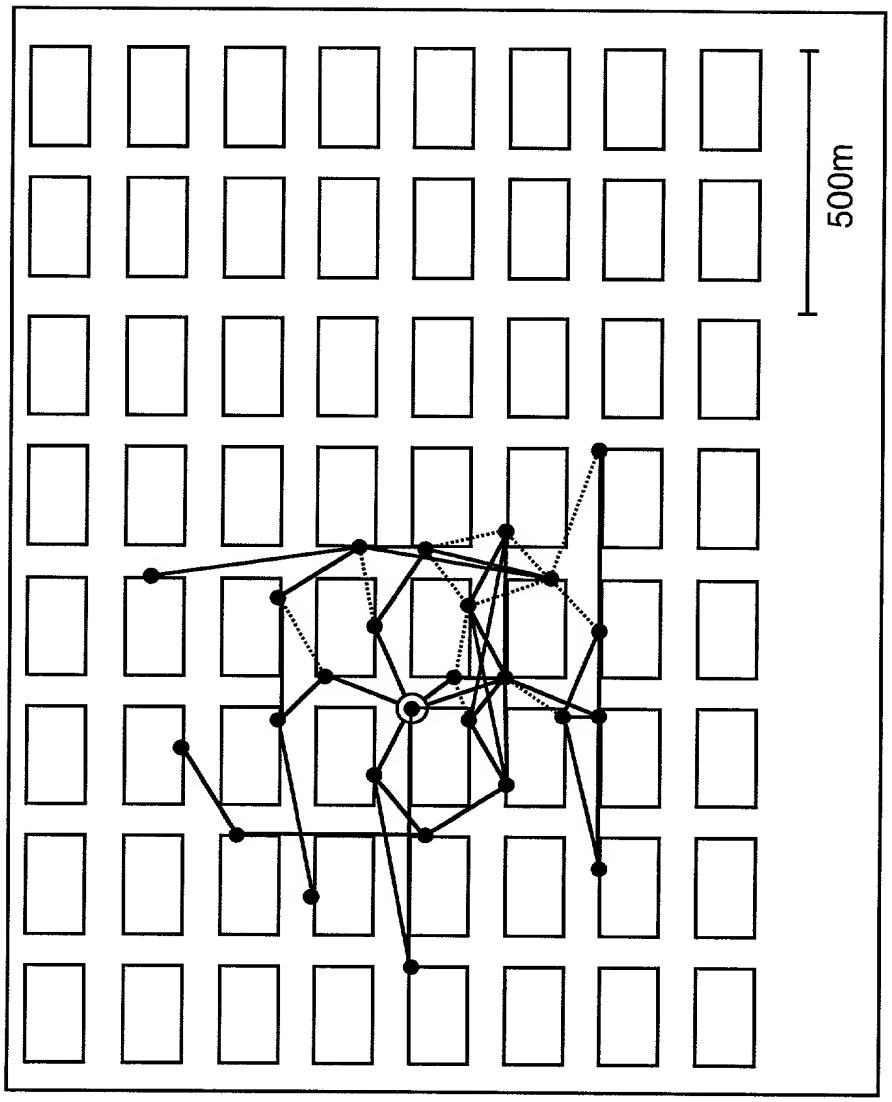


FIG. 3

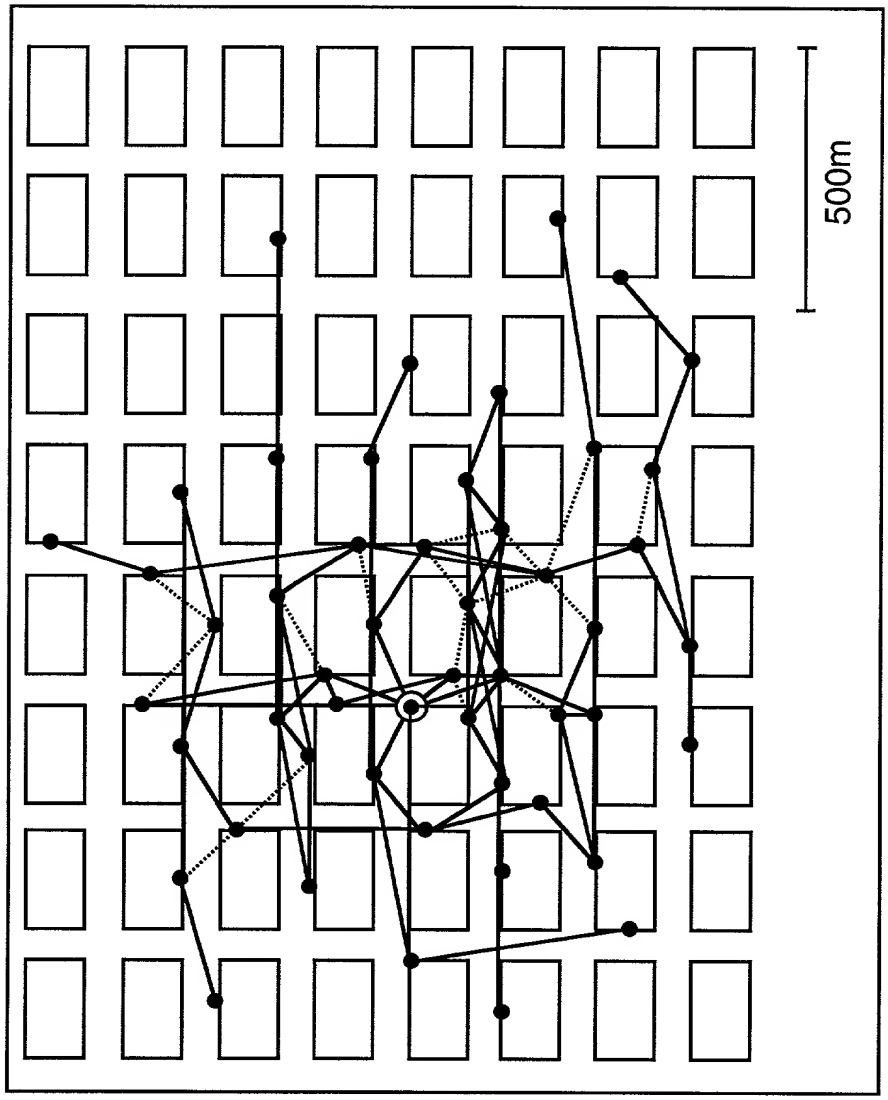


Network topologies in the rural case



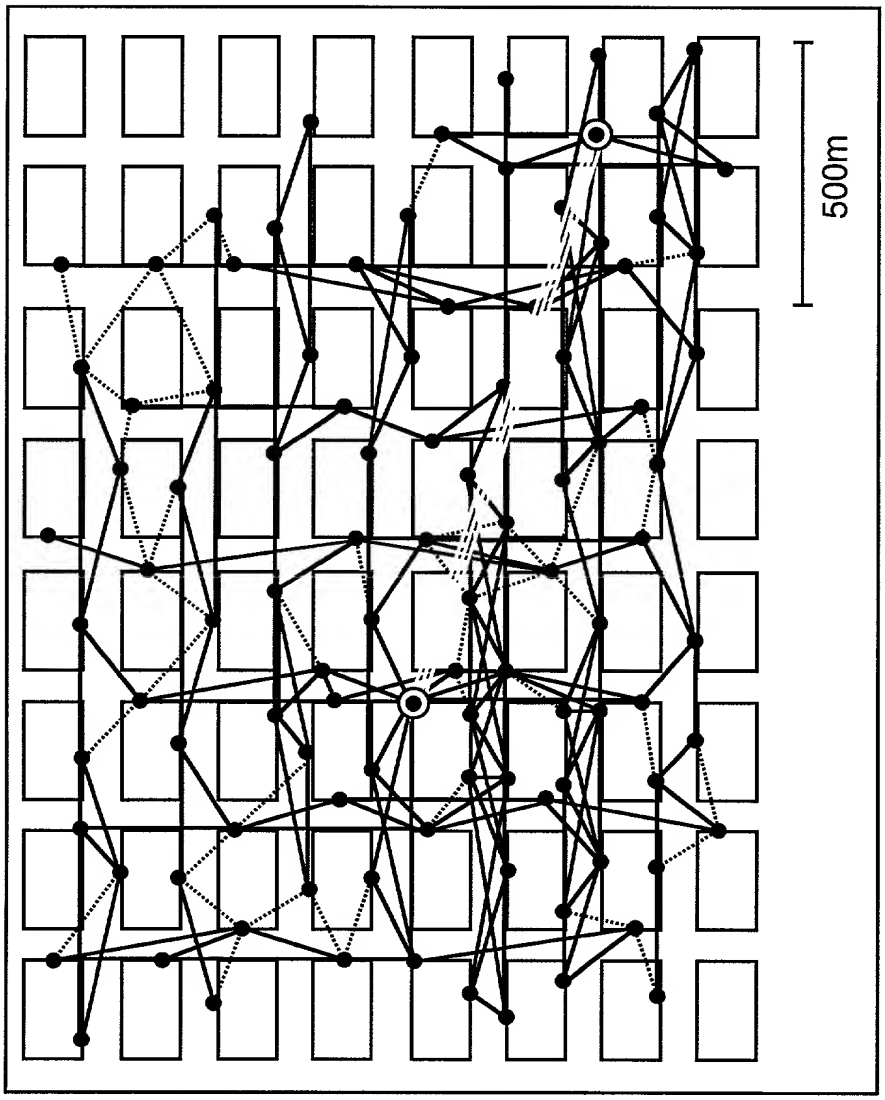
Ad-hoc Mesh network with 25 customers (all within 5 hops)

FIG. 5



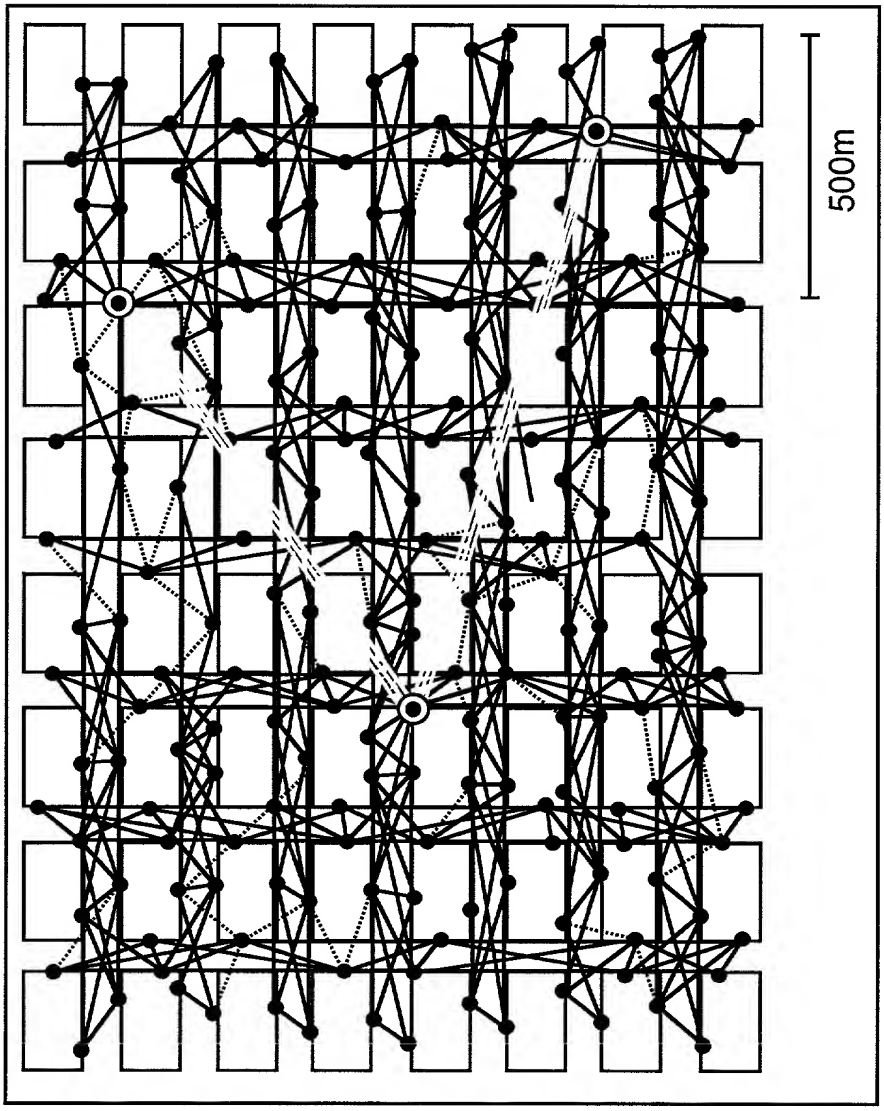
Ad-hoc Mesh network with 50 customers (all within 7 hops)

FIG. 6



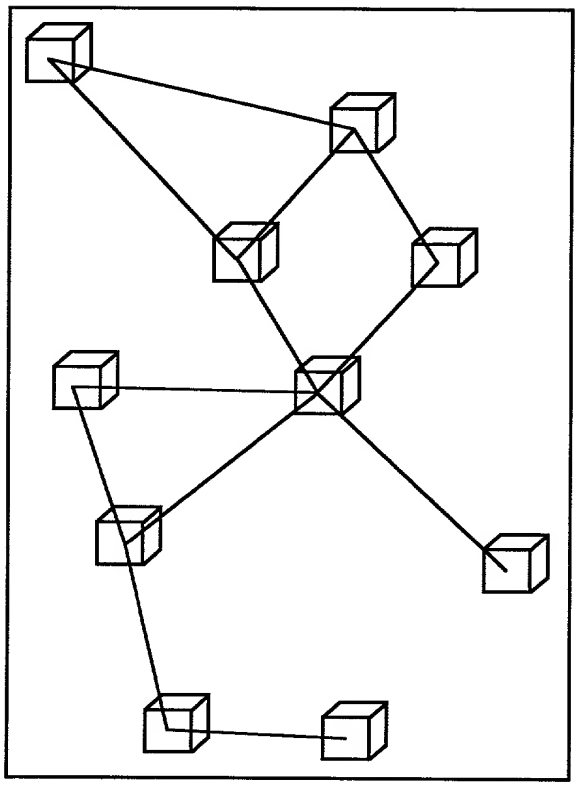
Ad-hoc Mesh network with 100 customers (all within 5 hops)

FIG. 7



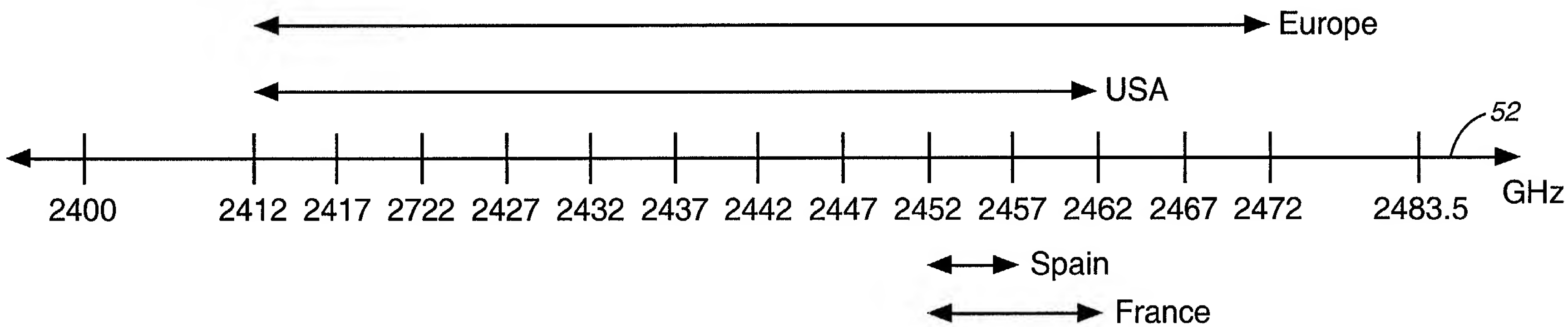
Ad-hoc Mesh network with 200 customers (all within 5 hops)

FIG. 8



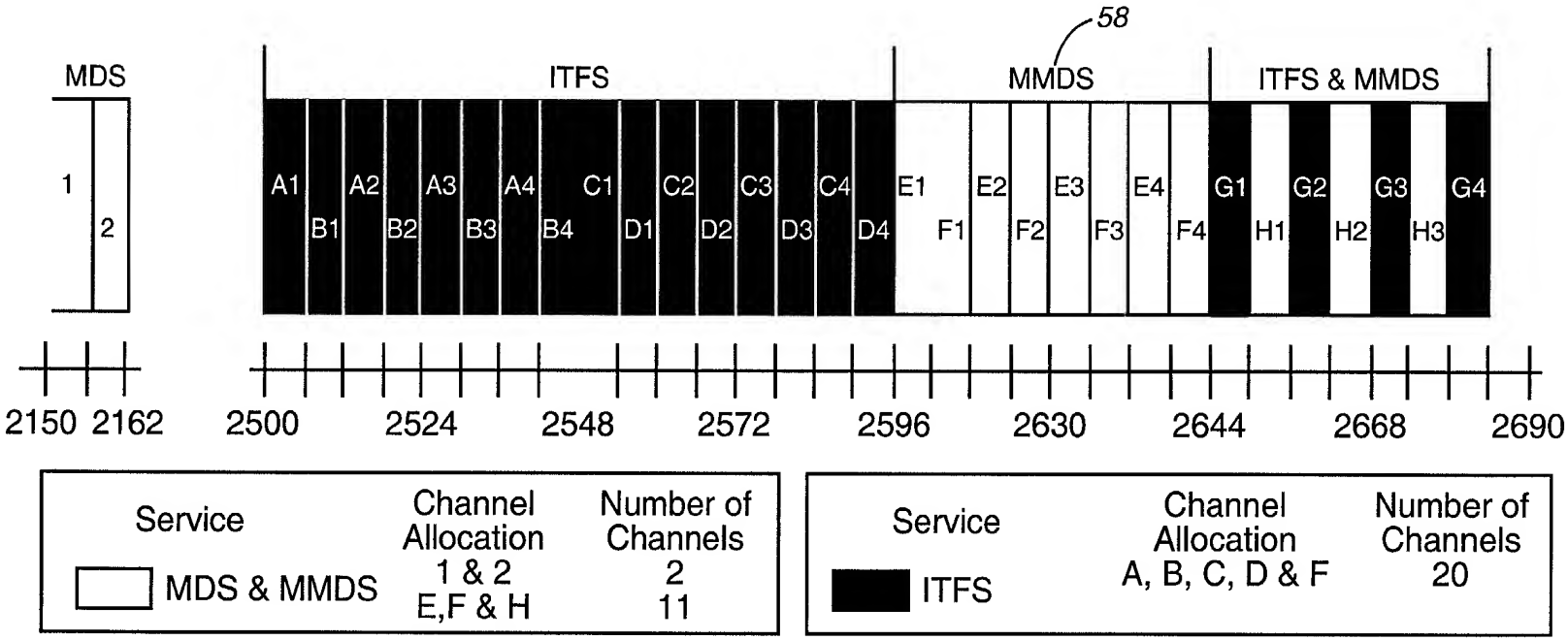
Mesh network applied in rural case

FIG. 9



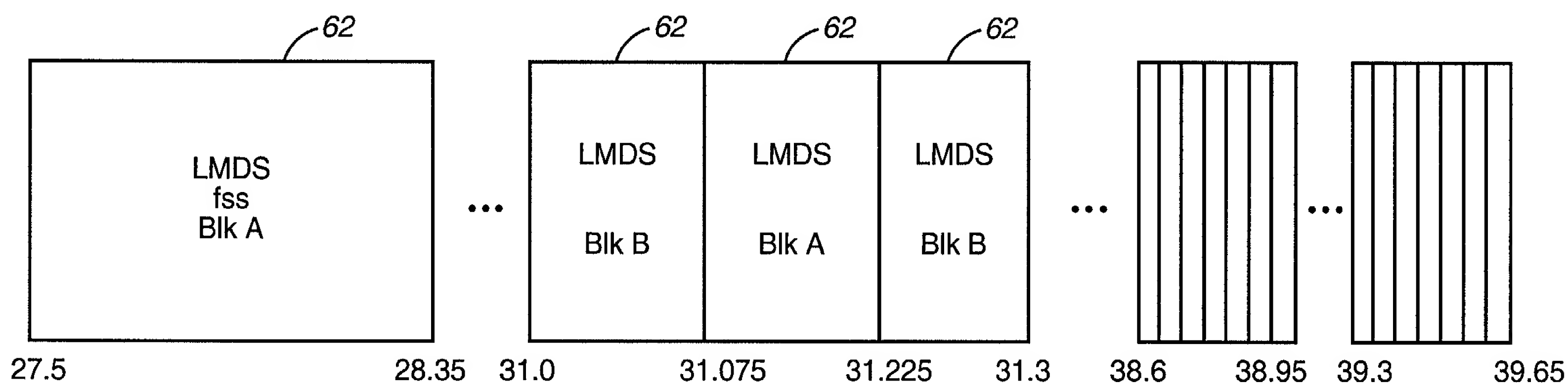
ISM band spectrum allocation

FIG. 10



MMDS bandwidth allocation (USA example)

FIG. 11



LMDS bandwidth allocation (USA example)

FIG. 12

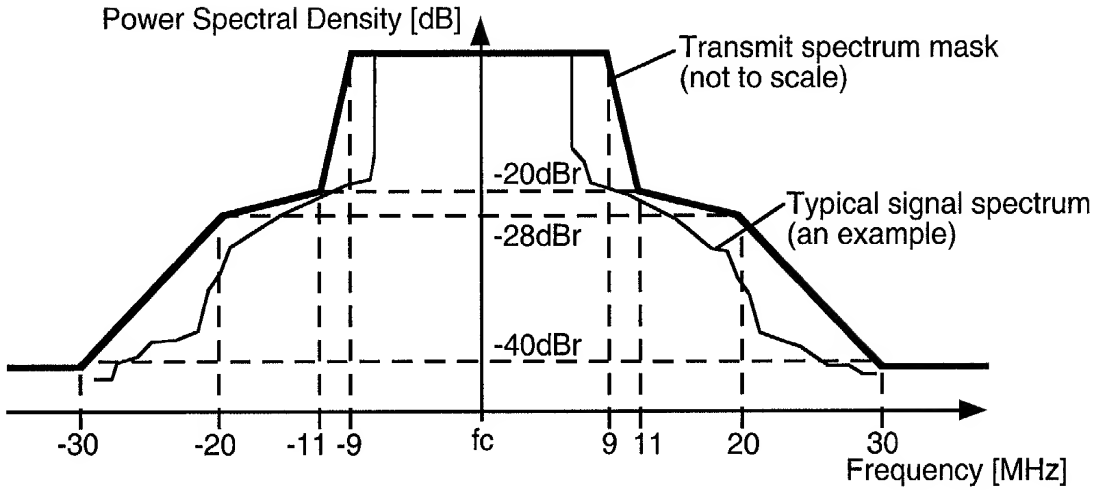


FIG. 13A

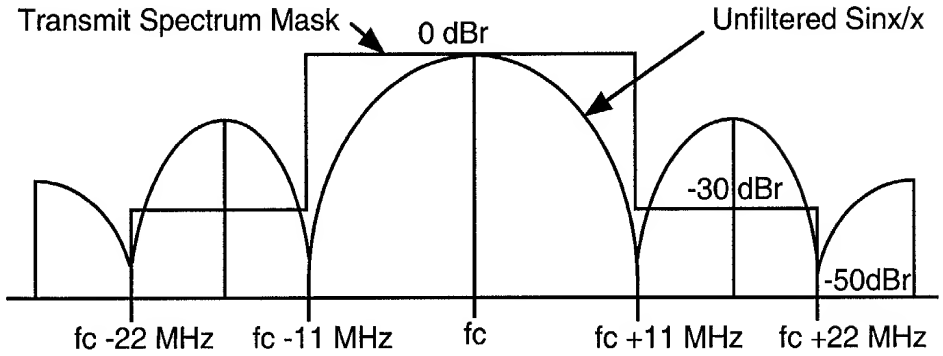
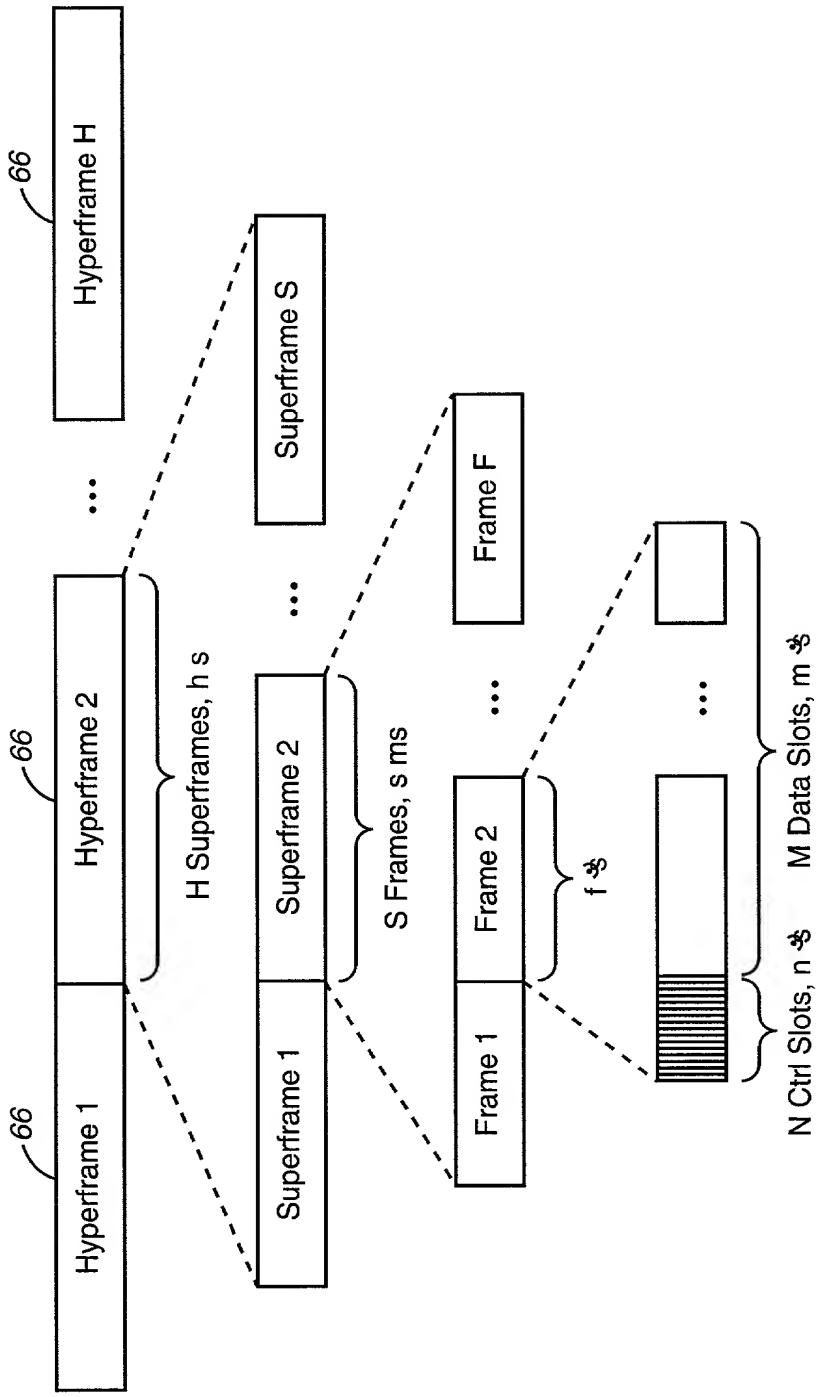


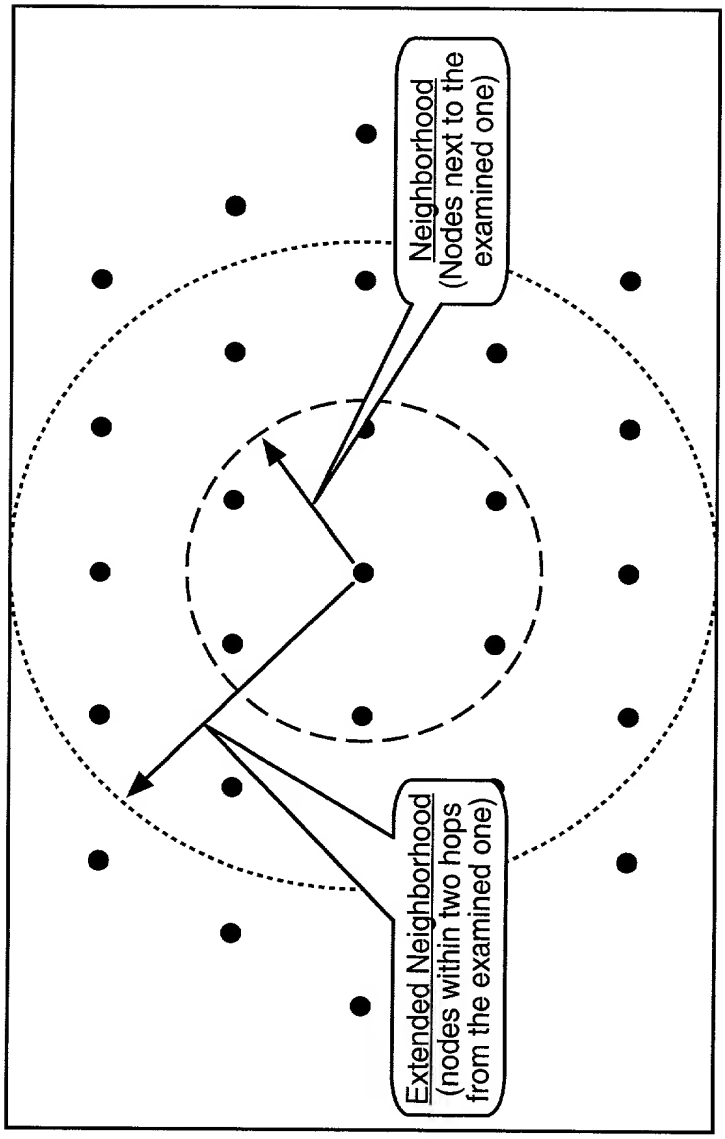
FIG. 13B

IEEE 802.11 Spectral masks: OFDM (11a) and DSSS (11 and 11b)



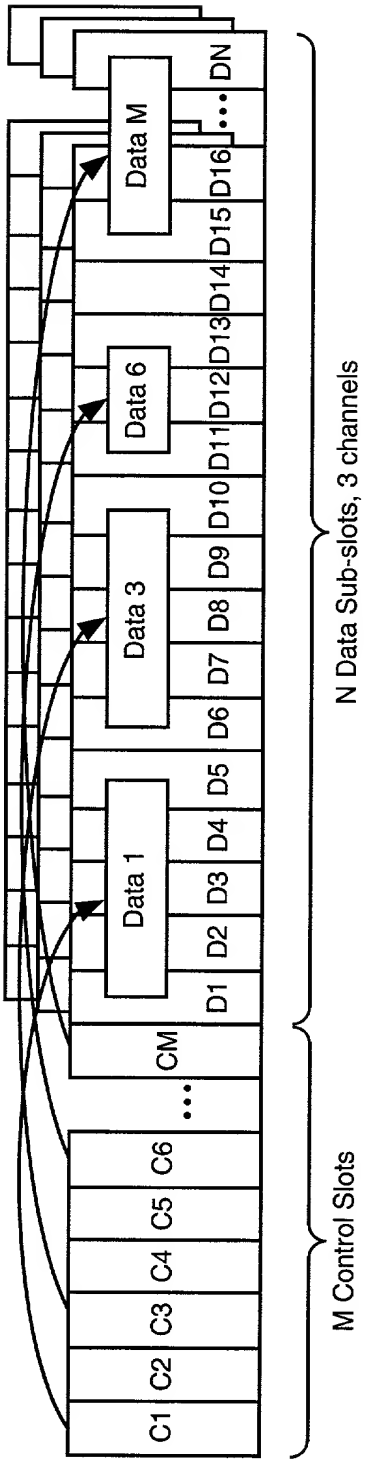
Hyper-, Super- and Frame structure

FIG. 14



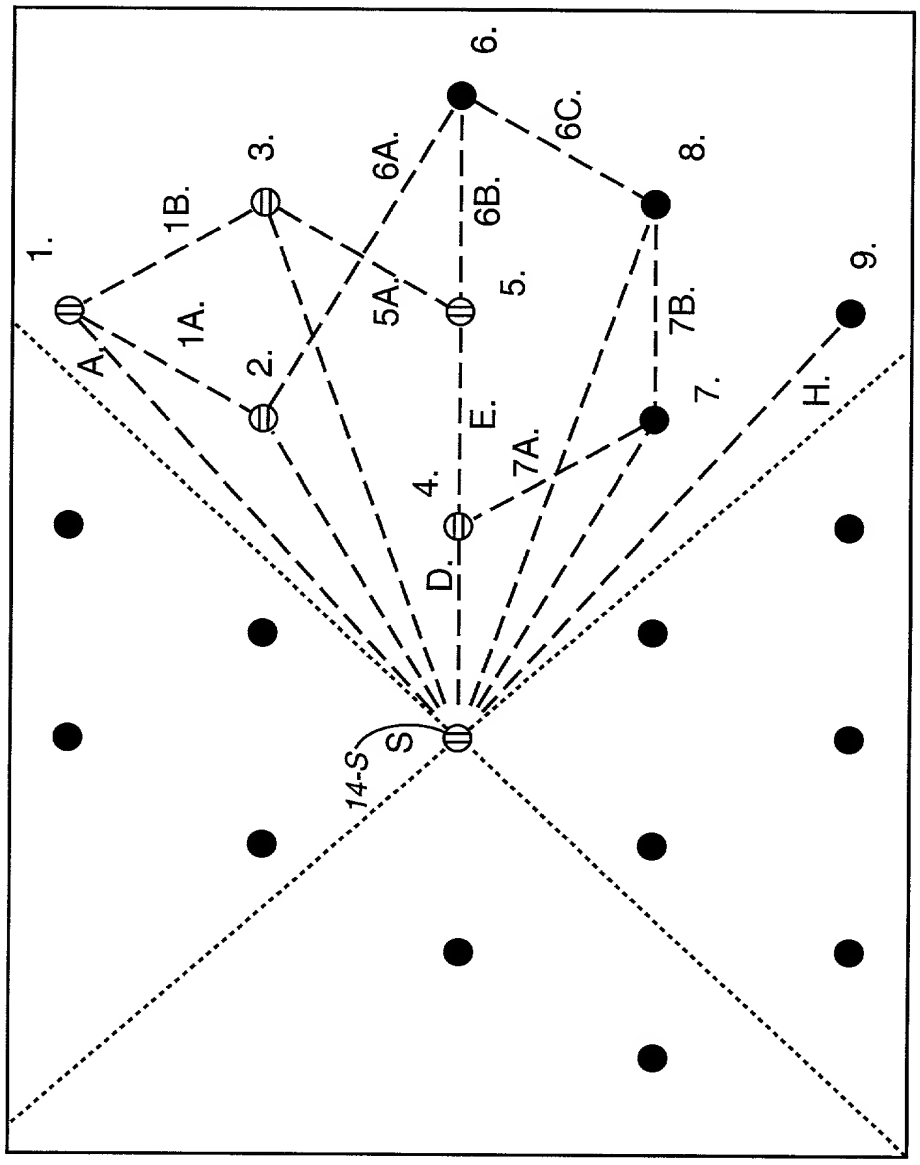
Neighborhood definitions

FIG. 15



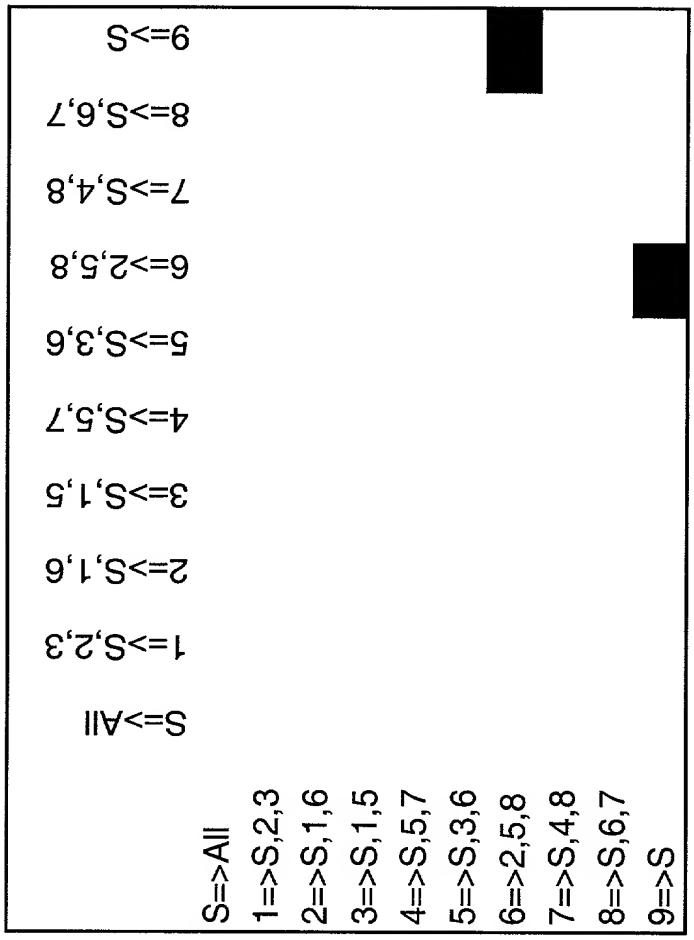
Data slot Reservation example

FIG. 16



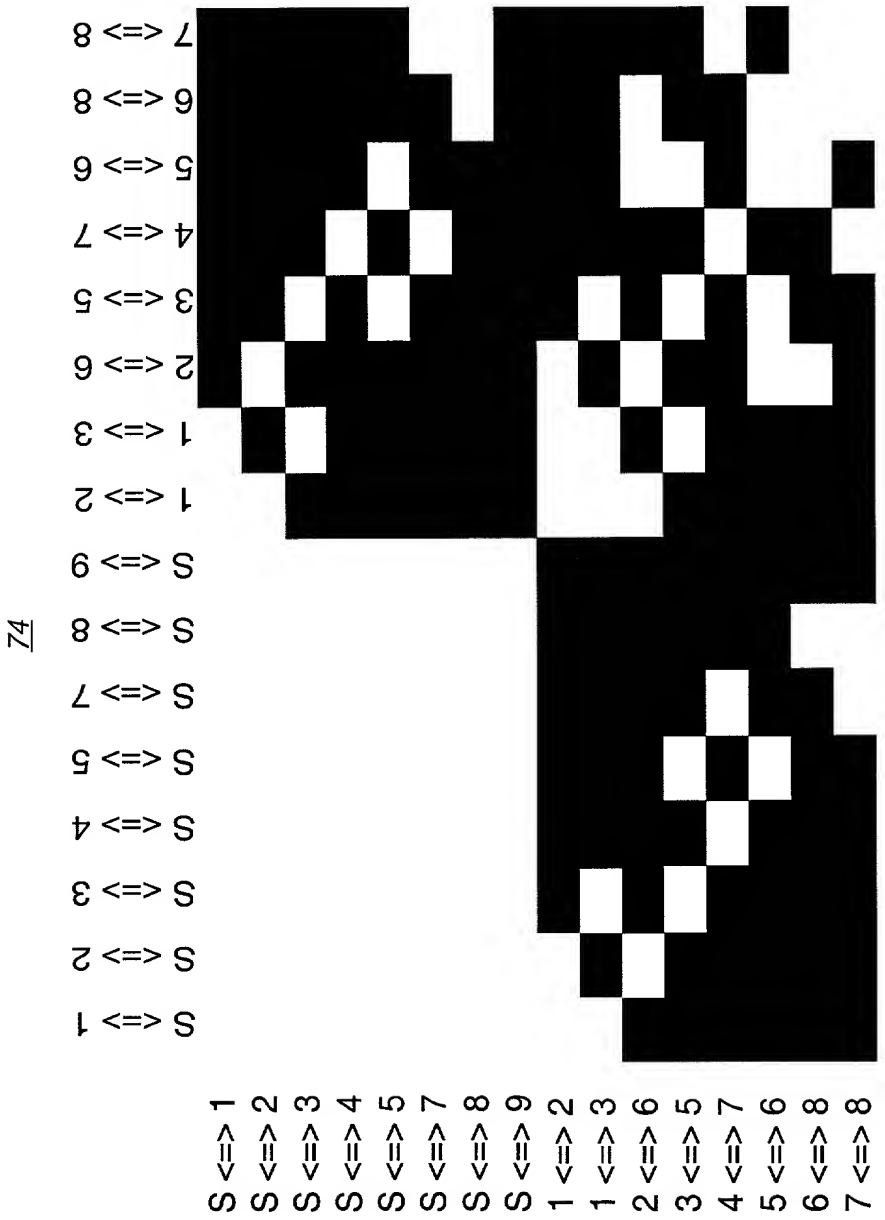
PMT Tier with 90□ sectors at the sink (S)

FIG. 17



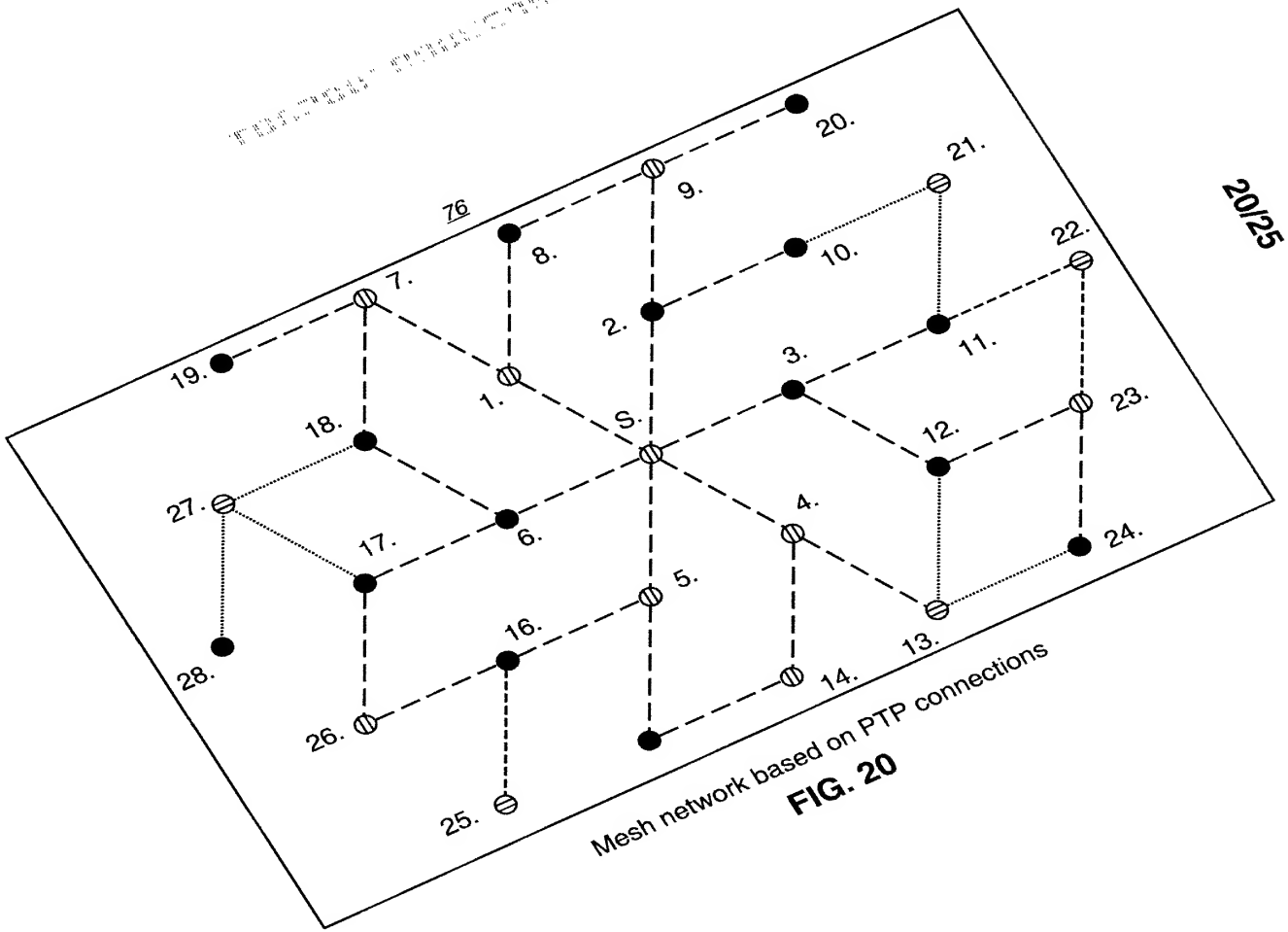
Multi-cast scheduling (black denotes empty slot)

FIG. 18



Traffic matrix for network in Figure 17 (black denotes slot available for simultaneous transmission)

FIG. 19


76
1.
2.
3.
4.
5.
6.
7.
8.
9.
10.
11.
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16.
17.
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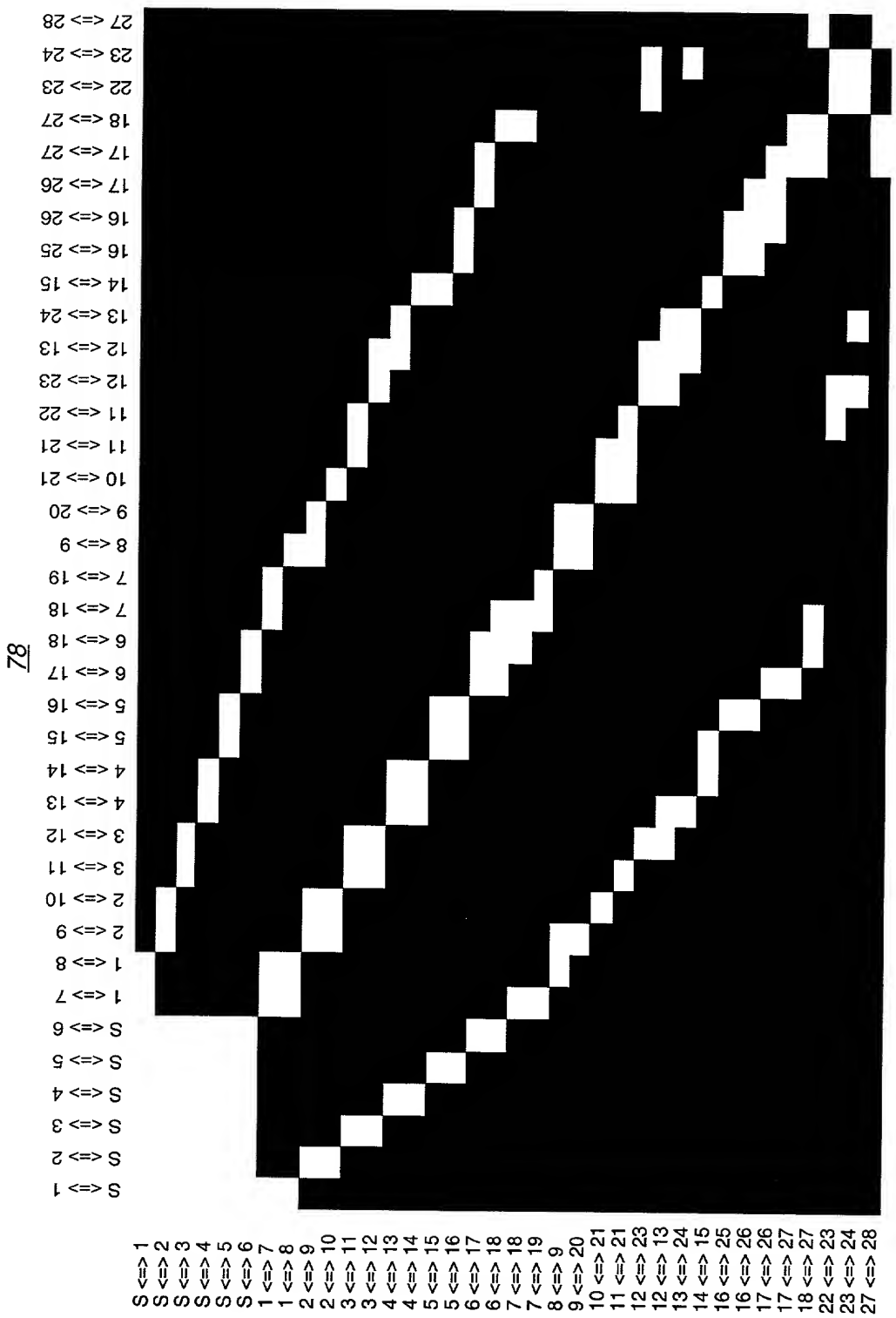
28.
S.
Mesh network based on PTP connections

FIG. 20



Traffic matrix for network in Figure 20 (black denotes slot available for simultaneous transmission)

FIG. 21

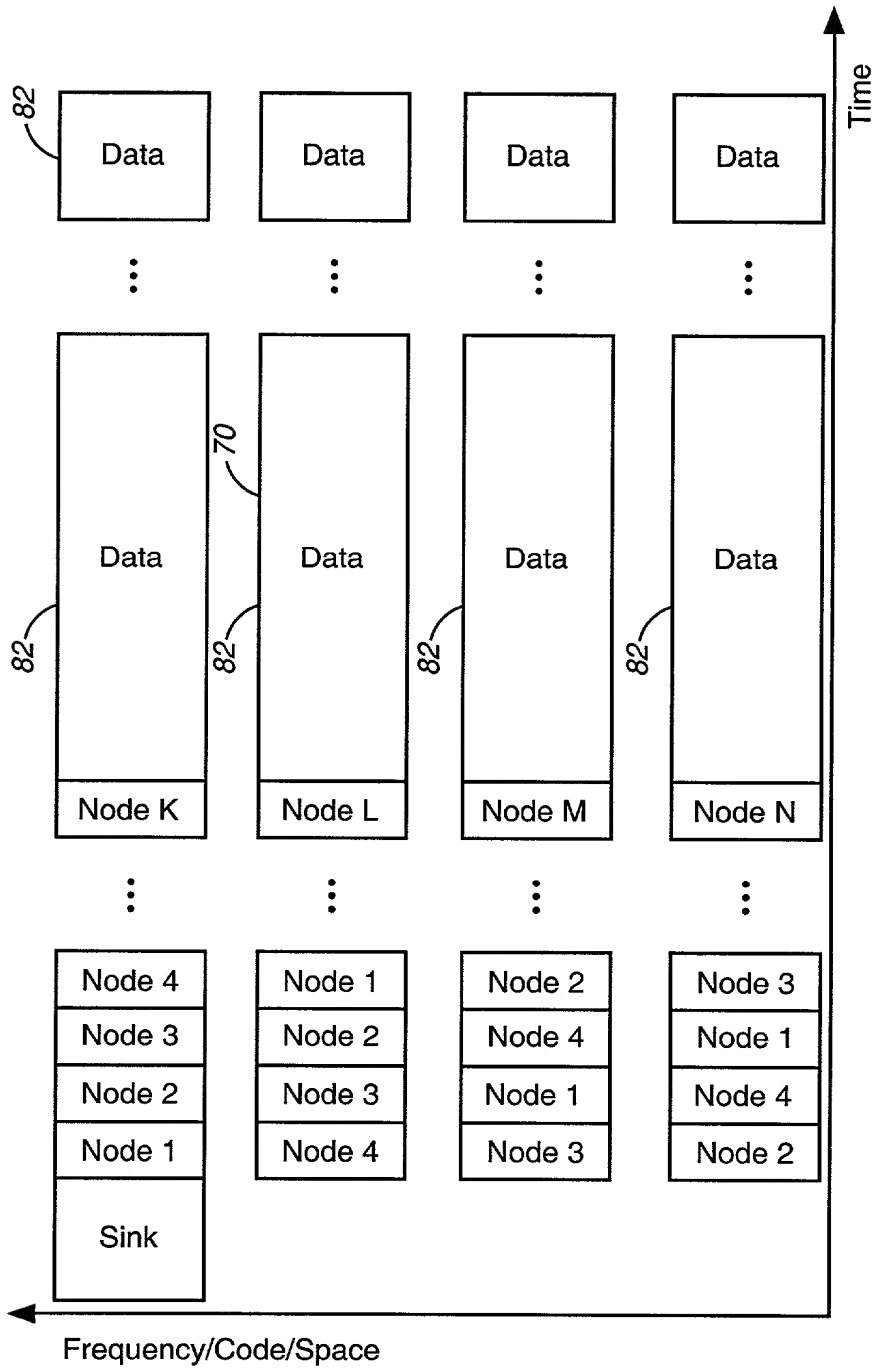
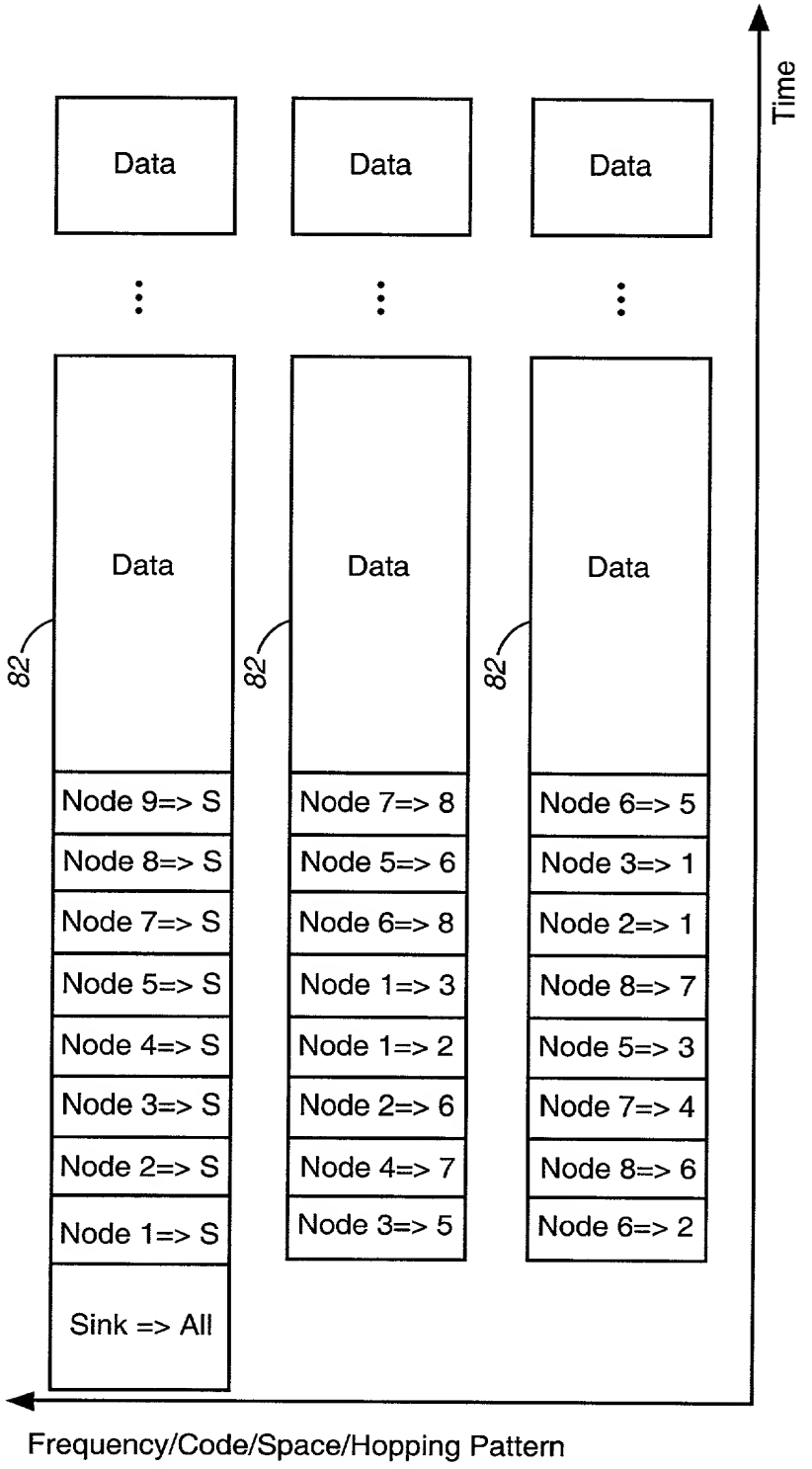
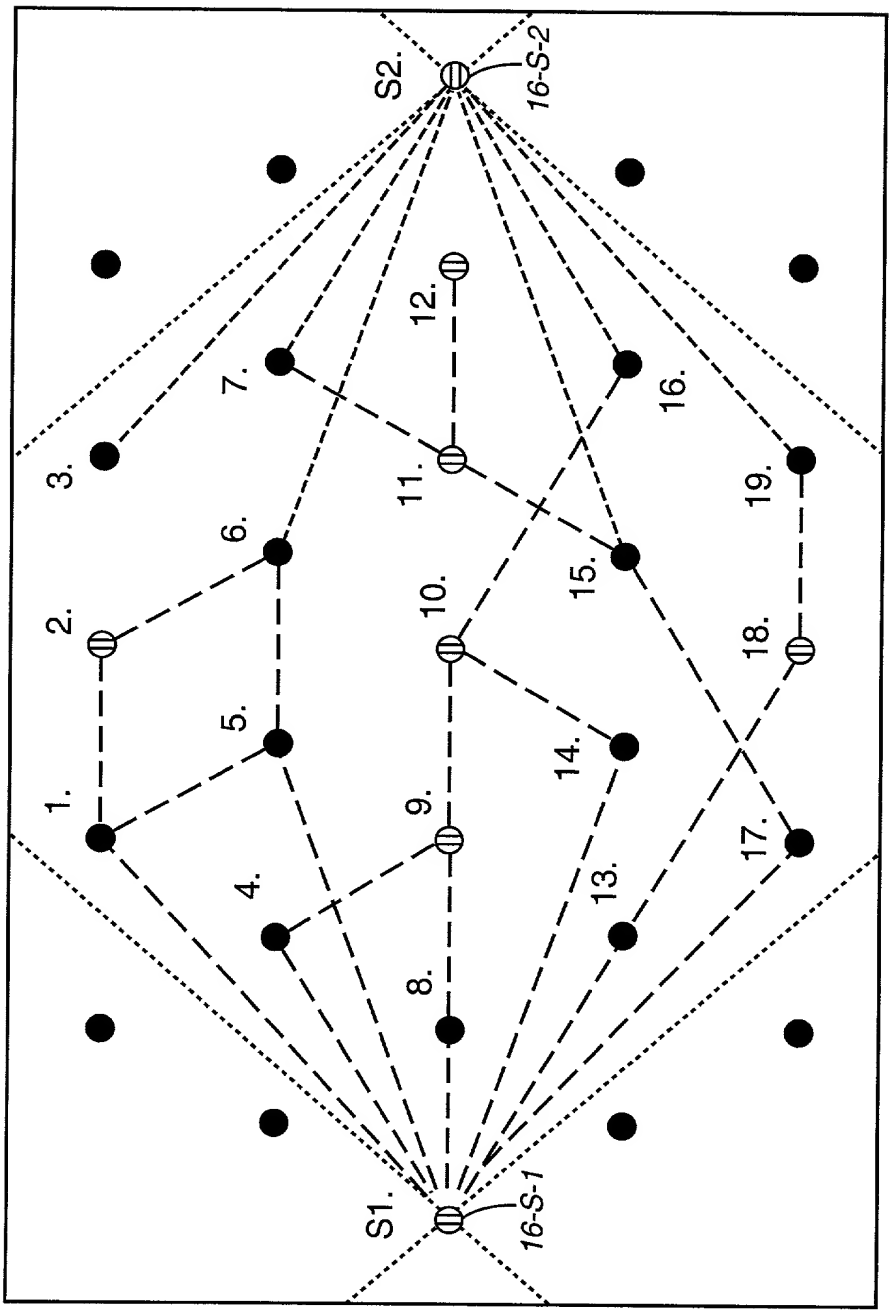

82
Data
Data
Data
Data
Time
70
Data
Data
Data
Data
82
82
82
82
Node K
Node L
Node M
Node N
Node 4
Node 3
Node 2
Node 1
Sink
Node 1
Node 2
Node 3
Node 4
Node 2
Node 4
Node 1
Node 3
Node 3
Node 1
Node 4
Node 2
PMT frame structure
Frequency/Code/Space

FIG. 22



PMT control slot & channel allocation example for network in Figure 17 (assuming narrowbeam antennas at nodes).

FIG. 23



A PMT network with two sinks

FIG. 24

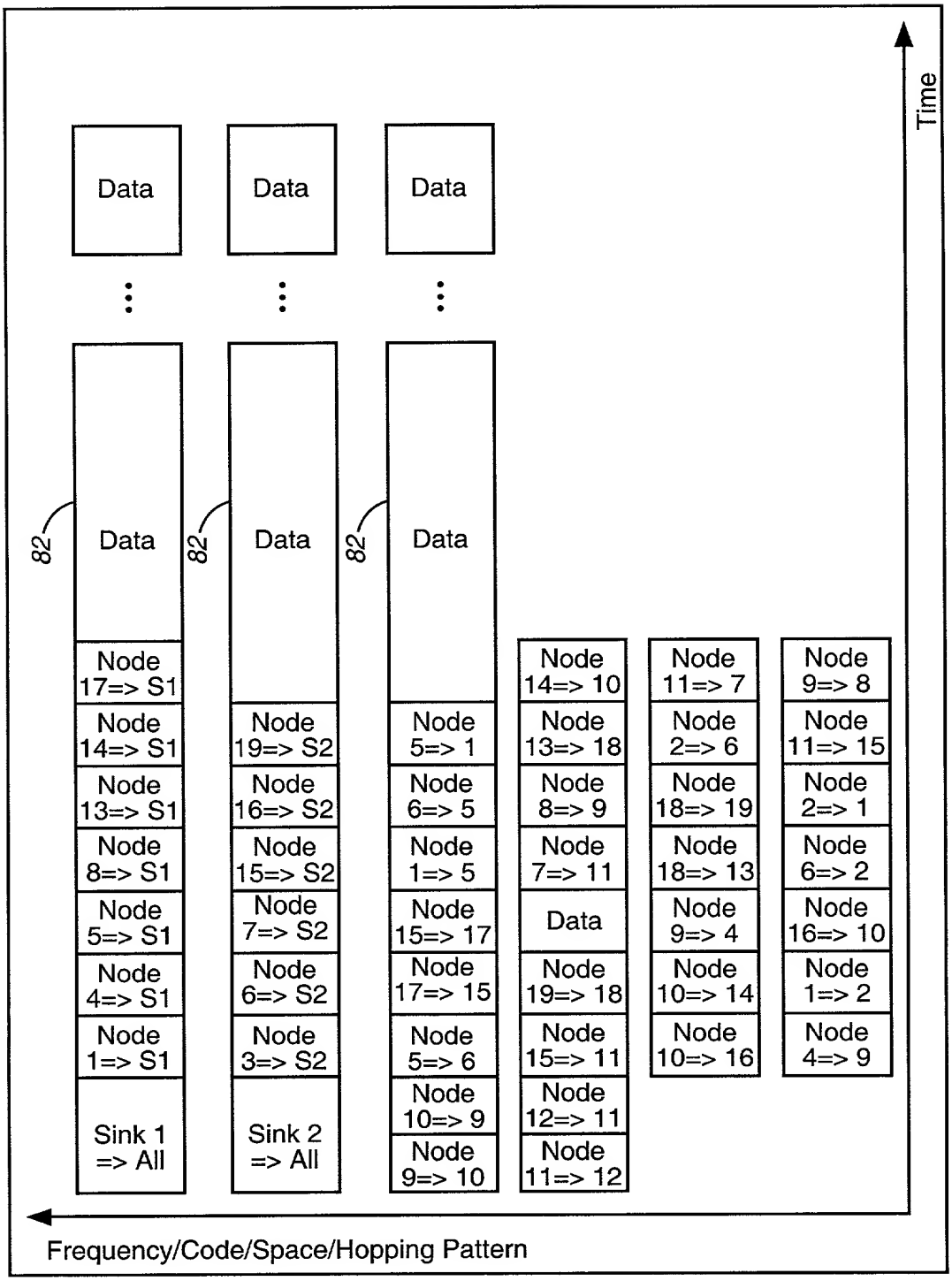


FIG. 25

PMT control slot & channel allocation example for network in Figure 17 (assuming narrowbeam antennas at nodes).